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V. RECEIVING WATERS:

The discharge is into Bayou Grosse Tete, thence into the Intracoastal Canal in segment 120104 of the Terrebonne Basin. This segment was listed on the 2004 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 120104 of the Terrebonne Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 120104	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 120104 of the Terrebonne Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Subsegment 120104 was previously listed as impaired for atrazine, nitrate/nitrite, dissolved oxygen, total dissolved solids, total phosphorus, and pathogen indicators. Total Maximum Daily Load Studies (TMDLs) have been developed to address impairments. Nonetheless, the Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving waterbodies based upon additional TMDLs and/or water quality studies. A reopener clause has been included in the permit.

The following TMDL's have been established for subsegment 120104:

EPA TMDL for Fecal Coliform Bacteria, Chlorides, Sulfates, Total Dissolved Solids, Turbidity, and Total Suspended Solids in the Terrebonne Basin, LA

Bayou Grosse Tete, Segment 120104 is impaired for Total Dissolved Solids (TDS) and Fecal Coliform bacteria. No domestic wastewater facilities with permit limits for chloride, sulfate, or TDS were found in the Terrebonne Basin, although it is possible that the discharges from such facilities could have slightly elevated levels of these parameters. Therefore, these facilities were given WLAs using facility flow and water quality criteria. As long as point source discharges of treated wastewater contain parameter levels at or below these permit limits, they should not be a cause of exceedences of water quality criteria. Therefore, permit limits for TDS equivalent to criteria for Segment 120104 found at LAC 33:IX.1123.Table 3 have been placed in the permit. Although the TMDL addressed chloride, sulfate, turbidity, and TSS, these pollutants were not causes of impairment for Segment 120104. Since these pollutants were not causes of impairments nor were they attributed to sanitary discharges, they were not limited in the permit. (It should be noted that total suspended solids (TSS) can be discharged from sanitary treatment plants. However, they were not determined to be a source in this TMDL. Nonetheless, TSS is limited in the permit based on the previous permit.)

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In addition, Bayou Grosse Tete has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Limits consistent with this standard have also been placed in the permit.

Bayou Grosse Tete TMDL for Biochemical Oxygen Demanding Substances and Nutrients

Bayou Grosse Tete (Subsegment 120104) is impaired for organic enrichment/low DO. The TMDL established load limitations for oxygen-demanding substances and goals for reduction of those pollutants. Thirteen permitted facilities were addressed in the TMDL. Seven of these discharges were either too small or too far away to have an impact and are accounted for as nonpoint loading through the calibration process. (They will fall under one of several state regional permitting policies that determine permit limitations.) Of the remaining point sources dischargers, a 0% reduction was required by the TMDL. Therefore, effluent limitations for BOD₅ will remain the same as the previous permit. LDEQ's position is that when oxygen demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. Thus, nitrate/nitrite will be controlled by the BOD₅.

Although listed as a Category 5, to date no TMDL has been done for atrazine.

EPA TMDL for Mercury in Coastal Bays and Gulf Waters

Although segment 120104 is not impaired for mercury, EPA conducted a TMDL for Mercury in Coastal Bays and Gulf Waters. The Town of Maringouin's Wastewater Treatment Facility falls within the coastal area considered in the TMDL. A list of commercial users submitted by the facility was reviewed for the potential to discharge mercury. Based on the review, this Office does not consider the facility to contribute to the discharge of mercury.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 120104 of the Terrebonne Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered species or candidate species or their critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

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Permits Division

Department of Environmental Quality

Office of Environmental Services

P. O. Box 4313

Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:**Final Effluent Limits:****OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	13	10 mg/l	15 mg/l	Bayou Grosse Tete Watershed TMDL for Biochemical Oxygen Demanding Substances and Nutrients, including Bayou Portage and Bayou Fardoche. July, 2007.
TSS	19	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
TDS	---	200 mg/l	---	EPA TMDL for Fecal Coliform Bacteria, Chlorine, Sulfates, TDS, Sedimentation, TSS, and Turbidity for Selected Subsegments in the Terrebonne Basin. March, 2007.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

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Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0086771: Issued: March 1, 2003
Expired: February 28, 2008

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	Report mg/l	Report mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates no recent inspections were performed for this facility.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement actions administered against this facility:

LDEQ Issuance:

Docket #: WE-C-02-0253
Date Issued: June 17, 2004

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Findings of Fact:

1. Permittee did not monitor effluent at the frequency specified in the permit. (Permittee monitored once per month instead of twice per month.)
2. Permittee failed to submit DMRs for February, March, and June of 2001, May, August, and September of 2002, and July, 2003.
3. The permittee did not sign and certify DMRs.
4. No flow values were reported for 2001, 2002, and 2003.
5. The permittee reported numerous effluent violations on DMRs from 2001 to 2004.

Order:

1. The permittee was ordered to submit a report detailing the circumstances of the violations and corrective action taken as a result of violations.

Docket #: WE-C-02-0253A

Date Issued: May 20, 2005

Findings of Fact:

The Compliance Order was amended. Findings of Fact also included that respondent failed to submit non-compliance reports for the violations submitted from the period of January, 2001 through June, 2004. The original compliance order was incorporated by reference.

C) DMR Review

A review of the discharge monitoring reports for the period beginning **January, 2005** through **September, 2007** has revealed the following violations:

<u>Parameter</u>	<u>Number of Violations</u>
BOD ₅ (monthly avg)	29
BOD ₅ (weekly avg)	27
TSS (monthly avg)	17
TSS (weekly avg)	11
Fecal coliform (monthly avg)	6
Fecal coliform (weekly avg)	9

*Due to numerous violations and compliance history, this facility was referred to enforcement.

XII. ADDITIONAL INFORMATION:

PERMIT REOPENER CLAUSE

In accordance with LAC 33:IX.2361.C.3, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit, or ;
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving waterbody. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

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Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.15 MGD.

Effluent loadings are calculated using the following example:

BOD: $8.34 \text{ lb/gal} \times 0.15 \text{ MGD} \times 10 \text{ mg/l} = 12.5 \text{ lb/day}$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language has been included in the permit.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Maringouin, Maringouin Wastewater Treatment Facility, May 3, 2007.